

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 87-22

SITE CLEANUP REQUIREMENTS FOR:
SAFETY-KLEEN CORPORATION AND
JOHN BERTOLOTTI (REAL PROPERTY ASSOCIATES)

FOR THE FACILITY LOCATED AT:

3461 WOODWARD AVENUE
SANTA CLARA
SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. Safety-Kleen Corporation (Safety-Kleen), a national solvent supplier and reclaimer, operated a service facility in the City of Santa Clara, Santa Clara County, from 1977 to 1984. The facility occupies approximately one-third of an acre of land at 3461 Woodland Avenue and is located about one-half mile west of the Guadalupe River. John Bertolotti (Real Property Associates) owns the property and leases it to Safety-Kleen, although Safety-Kleen operations ceased in 1984 and all equipment associated with Safety-Kleen's operation has been removed from the site.
2. Safety-Kleen and John Bertolotti (Real Property Associates) are jointly considered dischargers.
3. Safety-Kleen installed two 15,000 gallon underground steel tanks in 1977 to store clean and spent solvent. From the clean solvent tank, solvent was pumped, via approximately 60 feet of galvanized steel underground piping, to a nozzle-controlled hose and emptied into drums for distribution. Spent solvent, associated solids and oil and grease, were emptied from drums into a screened dumpster. The liquid portion flowed through approximately 110 feet of galvanized steel underground piping to the spent solvent tank. The dumpster sludge was stored in 16-gallon drums in a warehouse onsite. Tanker trucks operated by Safety-Kleen emptied the spent solvent tank and filled the clean solvent tank via fill pipes leading to the tanks.
4. Investigations conducted to date indicate that subsurface pollution resulted from spillage of solvents into the soil surrounding the fill pipe area leading to the tanks in front of the site and spillage from the spent solvent dumpster to the fill pipe in the rear of the site. When unloading spent solvent, the dumpster was not always aligned with the fill pipe and spillage occurred onto the surrounding soil.

5. The type of clean and spent solvent stored in underground tanks was primarily mineral spirits (petroleum naptha). Light aromatic hydrocarbons, toluene, perchloroethene (PCE), 1,1,1 - trichloroethane (TCA), trichloroethene (TCE), and methylene chloride comprised less than 1 percent of the chemical composition of the solvent.
6. The two underground solvent tanks were removed in April 1984. Soil samples taken in the unsaturated zone below the open pit created by removing the tanks contained mineral spirit concentrations ranging from 2000 ppm at a depth of 5.5 feet below ground surface to 4600 ppm at a depth of 8.0 feet below ground surface. A 2.0 inch layer of spent solvent was floating on top of the groundwater encountered in soil borings. In the dumpster or fill pipe area, soil in the unsaturated zone contained concentrations of mineral spirits ranging from non-detectable (less than 25 ppm) within 0.5 feet of the ground surface to 3900 ppm one foot from the surface. A thin film of mineral spirits was floating on top of the groundwater in a monitoring well in the fill pipe area.
7. In March 1986, 675 cubic yards of soil and 41,000 gallons of groundwater were removed from the open pit area where the underground tanks were located. The discharger is in the process of establishing soil cleanup levels with the Department of Health Services as part of RCRA site closure requirements.
8. Ten shallow monitoring wells were installed on-site and off-site as of September 1986 to evaluate the lateral extent of groundwater pollution. A shallow aquifer exists from approximately 12-25 feet below ground surface. The following concentrations of chemicals have been detected on-site in the shallow aquifer: 270 ppm dissolved mineral spirits, 0.330 ppm 1,1 dichloroethane and 0.170 ppm 1,2 dichloroethene. Lower concentrations of various other chemicals have also been detected on-site. The lateral and vertical extent of chemicals in groundwater is not defined.
9. The dischargers have caused or permitted, and threaten to cause or permit waste to be discharged or deposited where it is or probably will be discharged to waters of the State and creates or threatens to create a condition of pollution or nuisance.
10. The Regional Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on July 21, 1982. The Basin Plan contains water quality objectives for South San Francisco Bay and contiguous surface and groundwaters.

11. The existing and potential beneficial uses of the groundwater are:
 - municipal and domestic supply
 - industrial service and process supply
 - agricultural water supply
12. Onsite and offsite interim containment and cleanup measures need to be implemented to alleviate the threat to the environment posed by the continued migration of the groundwater plume of organic solvents and to provide a substantive technical basis for designing and evaluating the effectiveness of final cleanup alternatives.
13. The Board has notified the dischargers and all interested agencies and persons of its intent under California Water Code Section 13304 to prescribe Site Cleanup Requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
14. The Board, at a public meeting, heard and considered all comments pertaining to the discharge.
15. This action is an order to enforce the laws and regulations administered by the Board. This action is categorically exempt from the provisions of the California Environmental Quality Act under Section 15321 of the Resources Agency Guidelines.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code that the discharger shall cleanup and abate the effects described in the above findings as follows.

A. PROHIBITIONS:

1. The discharge of wastes or hazardous materials in a manner which will degrade water quality or adversely affect beneficial uses of waters of the State is prohibited.
2. Further significant migration of pollutants through subsurface transport to waters of the State is prohibited.
3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of pollutants are prohibited.

B. SPECIFICATIONS:

1. The storage, handling, treatment, or disposal of polluted soil or groundwater shall not create a nuisance as defined in Section 13050(m) of the California Water Code.

2. The dischargers shall conduct monitoring activities as needed to define the local hydrogeological conditions, and the lateral and vertical extent of the soil and groundwater pollution in and contiguous to the zone of known pollution from the site. Should monitoring results show evidence of plumemigration, additional plume characterization shall be required.

C. PROVISIONS:

1. In order to comply with Specification B.2., the dischargers shall complete the following tasks according to the following time schedule.

TASKS	COMPLETION DATE
Complete the work described in the proposal submitted February 5, 1987, as modified by Executive Officer approval letter, which defines the lateral and vertical extent of organic solvent and dissolved mineral spirits pollution. Submit a final technical report discussing the results of implementing the work plan.	June 9, 1987


2. In order to comply with Prohibitions A.1 and A.2, the discharger shall meet the following compliance time schedule.

TASKS	COMPLETION DATE
a. Submit a technical report satisfactory to the Executive Officer which evaluates interim cleanup alternatives for groundwater contamination and which contains a recommended interim cleanup strategy for the site for the Executive Officer's consideration.	August 9, 1987
b. Complete construction and implement the approved interim cleanup alternative.	February 9, 1988
3. In order to comply with Prohibition 1, the following two items will be submitted in a report for Board consideration no later than fourteen months after completion of Task 2.b.	
a. An evaluation of the effectiveness of the interim cleanup measures.	

- b. An evaluation of final remedial measures and a recommendation on which measures should be implemented.
4. The submittal of technical reports evaluating immediate, interim and final remedial measures will include a projection of each measure's cost, effectiveness, benefits and impact on public health, welfare and the environment. The remedial investigation and feasibility study shall consider the guidance provided by Subpart F of the National Oil and Hazardous Substances Pollution Contingency Plan (40 CFR, Part 300), Section 25356.1(c) of the California Health and Safety Code, CERCLA and SARA guidance documents, and the State Water Resources Control Board's Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Water in California".
5. The dischargers shall submit to the Board quarterly reports acceptable to the Executive Officer containing monthly water level measurements, potentiometric maps and summaries of its progress toward compliance with the Provisions specified in this Order, including specific actions taken and actions proposed prior to the next report. Reports will be submitted within 45 days of the end of each calendar quarter with the first report due by April 15, 1987. These quarterly reports will also contain information specified in any self-monitoring programs approved by the Executive Officer.
6. Copies of all correspondence, reports, and documents pertaining to compliance with the Prohibitions, Specifications, and Provisions of this Order, shall be provided to the following agencies:
 - a. Santa Clara Valley Water District (Tom Iwamura)
 - b. Santa Clara County Health Department (Lee Esquibel)
 - c. City of Santa Clara (Robert Campbell)
7. If the dischargers are delayed, interrupted or prevented from meeting any of the completion dates specified in this Order, the dischargers shall promptly notify the Executive Officer.
8. All samples shall be analyzed by State-approved laboratories using approved EPA methods for the type of analysis to be performed. All laboratories shall maintain quality assurance/quality control records for Board review.
9. The dischargers shall permit the Board or its authorized representative in accordance with Section 13267(c) of the California Water Code:
 - a. Entry upon the premises on which any pollution sources exist, or may potentially exist, or on which any required records are kept;

- b. Access to copy any records required to be kept under terms and conditions of this Order.
 - c. Inspection of any monitoring equipment or methods required by this Order.
 - d. Sampling of any groundwater or soil which is accessible, or may become accessible to the discharger as part of any investigation or remedial action program required by this Order.
10. The dischargers shall maintain in good working order and operate, as efficiently as possible, any facility or control system installed to achieve compliance with the requirements of this Order.
11. The discharger shall report any newly discovered spill of oil or other hazardous material. Spills shall be reported to this Regional Board at 415-464-1255 on weekdays during office hours from 8 a.m. to 5 p.m. and to the Office of Emergency Services at 800-852-7550 during non-office hours, and the U.S. Coast Guard at 415-556-3741 by telephone immediately after discovery of occurrence. A written report shall be filed with the Regional Board within five (5) working days and shall contain information relative to: the nature of the spill, Spill Prevention and Containment Plan (SPCC) in effect, if any, estimated size of affected area, nature of effects, corrective measures that have been taken or planned, and a schedule of these activities, and persons notified.
12. The Board will review this Order periodically and may revise the requirements when necessary. This may include further investigation and cleanup if warranted by monitoring results and other considerations.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Regional on March 18, 1987.


for Roger B. James
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

A. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16 and the Environmental Protection Agency's Discharge Monitoring Report (Form 3320-1).

The principal purposes of a monitoring program by a waste discharger, also referred to as self-monitoring program, are: (1) to document compliance with site cleanup requirements and prohibitions established by this Regional Board, (2) to facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge, (3) to develop or assist in the development of effluent or other limitations, discharger prohibitions national standards of performance, pretreatment and toxicity standards, and other standards, and (4) to prepare water and wastewater quality inventories.

B. SAMPLING AND ANALYTICAL METHODS

Sample collection, storage, and analyses shall be performed according to the 40 CFR S136 or other methods approved and specified by the Executive Officer of this Regional Board.

Water and waste analyses shall be performed by a laboratory approved for these analyses by the State Department of Health Services (DOHS) or a laboratory waived by the Executive Officer from obtaining a certification for these analyses by the DOHS. The director of the laboratory whose name appears on the certification or his/her laboratory supervisor who is directly responsible for analytical work performed shall supervise all analytical work including appropriate quality control/quality assurance procedures in his/her laboratory and shall sign all reports of such work submitted to the Regional Board.

All monitoring instruments and equipment shall be properly calibrated and maintained to assure accuracy of measurements.

C. REPORTS TO BE FILED WITH THE REGIONAL BOARD

1. Violations of Requirements

In the event the discharger is unable to comply with the conditions of the site cleanup requirements and prohibitions due to:

- (a) maintenance work, power failures, or breakdown of waste treatment equipment, or
- (b) accidents caused by human error or negligence, or
- (c) other causes such as acts of nature,
- (d) poor operation or inadequate system design,

3. Self-Monitoring Reports

a. Reporting Period:

Written reports shall be filed quarterly by the fifteenth of the following month.

b. Letter of Transmittal:

A letter transmitting self-monitoring reports shall accompany each report. Such a letter shall include a discussion of requirement violations found during the reporting period and actions taken or planned for correcting any requirement violation. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to this correspondence will be satisfactory.

Monitoring reports and the letter transmitting reports shall be signed by either a principal executive officer or his duly authorized employee. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the report is true and correct.

c. Data Results:

- (1) Results from each required analysis and observation shall be submitted in the quarterly self-monitoring report. Results shall also be submitted for any additional analyses performed by the discharger for parameters for which effluent limits have been established by the Board.
- (2) The report shall also include a table identifying by method number the analytical procedures used for analyses. Any special methods shall be identified and should have prior approval of the Board's Executive Officer.

- (3) Lab results should be copied and submitted as an appendix to the regular report.
- (4) A map shall accompany the report, showing sampling locations and flow path to receiving waters.

D. DESCRIPTION OF SAMPLING STATIONS

All monitoring wells.

E. LOCATIONS FOR WATER LEVEL MEASUREMENTS

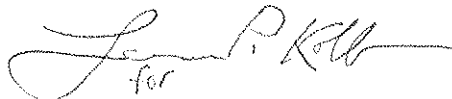
All monitoring wells.

F. SCHEDULE FOR SAMPLING, ANALYSES AND MEASUREMENTS

The schedule for sampling, analyses and water level measurements shall be that given as Table I.

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with site cleanup requirements established in Regional Board Order No. 87-22.
2. Is effective on the date shown below.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions will be ordered by the Executive Officer.



ROGER B. JAMES
Executive Officer

Effective Date: March 18, 1987.

Attachment: Table I

TABLE 1

SCHEDULE FOR SAMPLING, ANALYSES AND WATER LEVEL MEASUREMENTS

Sampling Station	All monitoring wells	Well # 3&8 & downgradient wells	Well # 5	All monitoring wells
TYPE OF SAMPLE	W	W	W	L
Sampling Frequency	Y	S	Q	M
EPA Method 601	Y	S	3Q	
EPA Method 624			1Q	
Dissolved mineral spirits		S		

LEGEND FOR TABLE

W = well sample
 L = water level measurement
 M = once each month
 Q = quarterly, once in February, May, August and November
 Y = once per year
 S = semiannually
 3Q = three quarters
 1Q = one quarter